DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

69.28 File #:

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003174 Address: 333 Burma Road **Date Inspected:** 16-Jun-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component:** Tower Mock-up

Summary of Items Observed:

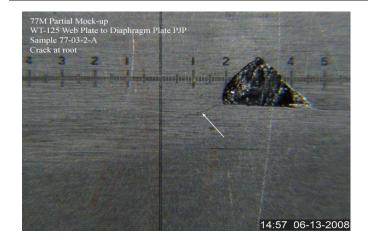
The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

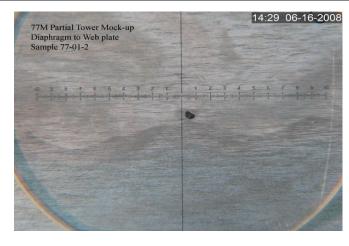
77M Partial Mock-up Macro Etch Evaluation

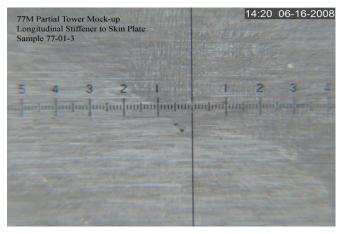
The Quality Assurance Inspector performed a review of the 77M partial mock-ups. There were three partial mock-ups representing the longitudinal stiffeners to skin plate connections, the diagonal stiffener to skin plate connection, and the diaphragm to web plate connection. Three samples were etched from each mock-up making a total of 15 welds. ABF Quality Control Inspector Xie Ping and ABF Representative Mike Williams evaluated the samples the previous day and stated that all samples comply with the contract documents. The Quality Assurance Inspector found three samples to be non-compliant. One for a crack and two for lack of fusion type discontinuities at a fusion boundry. The sample with what appeared to be a crack, identified as 77-03-2-A, Mr. Williams requested for the sample to be re-etched. After re-etching the sample appeared to comply with the contract requirements. ABF and ZPMC did not agree with the Quality Assurance Inspectors findings in regards to the two samples that contained lack of fusion at a fusion boundry, and requested that Caltrans Jim Merrill and ABF Steve Lawton get involved. Mr. Merrill reviewed the samples in question and after some discussion found the samples to be compliant. Below are digital photographs illustrating some of the sample discrepancies.

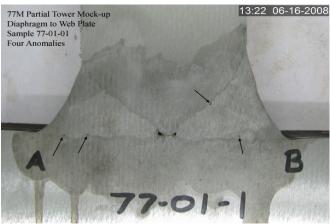
WELDING INSPECTION REPORT

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Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Josh Ishibashi (707) 552 7715, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman, Greg	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer